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10/517,284	12/08/2004	Matthias Muth	DE02 0149 US	2817

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EXAMINER
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ART UNIT	PAPER NUMBER
2183	

NOTIFICATION DATE	DELIVERY MODE
03/31/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 February 2009</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1 and 3-13</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1 and 3-13</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to the reply filed on 02/06/2009.

2.   Claims 1 and 3-13 are pending in the application and have been examined.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1, 3, 5 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Stolan

(U.S. Patent 5,864,663).

5.   Regarding claims 1, 5 and 9, Stolan discloses a method of monitoring the operation of at

least one microcontroller unit that is intended for at least one application and is associated with a

system, by means of at least one base chip, particularly a system base chip [col. 1, lines 11-16; a

circuit monitors a microprocessor], characterized in that:

        a reset of the microcontroller unit is caused if a reset condition is detected, wherein the

reset condition is transmission of at least one special sequence, particularly at least one drive or

access sequence assigned to the reset operation, to the base chip [col. 2, line 66 – col. 3, line 4]

and the reset of the microcontroller unit is confirmed under an enquiry routine by checking

whether the at least one special sequence has been successfully transmitted to the base chip [col.

2, line 66 – col. 3, line 4; the system selects either an overflow condition or an external reset; the

external reset system constitutes part of the "special sequence"; by selecting the external reset

and then detecting that the external reset is set, the system is "checking" whether the special

sequence has been successfully applied]; and

a special mode of operation, particularly a flash mode of the base chip, can be activated

once after the check has been made to see whether the special sequence has been successfully

applied and after the reset operation, by allowing access to at least one monitoring module that is

associated with the base chip to take place in a manner which is simplified in comparison with

the normal mode of operation of the microcontroller unit [col. 2, lines 41-45; col. 2, line 66 – col.

3, line 4; col. 5, lines 5-16; a programmable reset can be used in place of a watchdog timer reset].

6.   Regarding claim 3, Stolan discloses a method as claimed in claim 1, characterized in that:

during the special mode of operation, use is made of a special trigger code or a special trigger

signal for the monitoring module that is different from the normal mode of operation [col. 2,

lines 41-45; col. 2, line 66 – col. 3, line 4; col. 5, lines 5-16; a programmable reset can be used in

place of a watchdog timer reset]; and a fresh reset of the microcontroller unit is caused by the

normal trigger code or the normal trigger signal, to enable the special mode to be exited again

[col. 5, lines 5-16; a signal determines which type of reset may occur].

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

8.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

  1.   Determining the scope and contents of the prior art.
  2.   Ascertaining the differences between the prior art and the claims at issue.
  3.   Resolving the level of ordinary skill in the pertinent art.
  4.   Considering objective evidence present in the application indicating obviousness
         or nonobviousness.

9.   Claims 4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stolan

as applied to claims 1 and 5 above, and further in view of Ubicom (*Ubicom Product Report –*

IP2022 Internet Processor).

10.   Regarding claims 4 and 6, Stolan discloses a method as claimed in claim 1, characterized

in that: a distinction can be made between reset events that differ in relation to the operation of

the microcontroller unit [col. 5, lines 5-16; a signal determines which type of reset may occur].

Stolan does not explicitly disclose that these different reset events are suitably logged and made

known in at least one register unit by means of different register entries. However, as shown by

Ubicom [page 22, sections 3.6.2, 3.6.3], such operation is common in processing systems

because it is advantageous to know the cause of a reset in order to perform specific processing

operations associated with that type of reset. It therefore would have been obvious to perform

such operation in the system of Stolan.

11.   Regarding claim 7, Stolan in view of Ubicom discloses a base chip as claimed in claim 6,

characterized in that: the monitoring module is triggerable in particular by means of at least one

interface unit [Stolan, col. 2, lines 41-45; col. 2, line 66 – col. 3, line 4; col. 5, lines 5-16; an

interface unit causes a reset]; and/or to distinguish between the particular accesses to the

monitoring module, different reset events can be marked by different trigger codes or trigger

signals [Stolan, col. 2, lines 41-45; col. 2, line 66 – col. 3, line 4; col. 5, lines 5-16; different

signals indicated different types of resets].

12.   Regarding claim 8, Stolan in view of Ubicom discloses a base chip as claimed in claim 7,

characterized in that there is provided between the monitoring module and the microcontroller

unit at least one signal line for transmitting at least one trigger code or trigger signal that differs

from the normal mode of operation of the microcontroller unit [Stolan, col. 2, lines 41-45; col. 2,

line 66 – col. 3, line 4; col. 5, lines 5-16; a programmable reset can be used in place of a

watchdog timer reset].

13.   Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stolan as

applied to claims 1 and 5 above, and further in view of Kamiya et al. (U.S. Patent 6,144,887),

referenced from here forward as Kamiya.

14.   Regarding claims 10-13, Stolan does not explicitly disclose that microprocessor is

intended for the electronics of motor vehicles. However, as shown by Kamiya [col. 1, line 12 –

col. 2, line 67], the use of a memory rewriting system such as that disclosed in Stolan in the

electronics of motor vehicles is well known and common in the electronic arts, and such

operation would therefore have been obvious to a person having skill in the art.

Double Patenting

15.   The nonstatutory double patenting rejection is based on a judicially created doctrine

grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

improper timewise extension of the "right to exclude" granted by a patent and to prevent possible

harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

16.   Claims 1 and 3-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3-9 of copending Application No. 10/517471 in view of Stolan, Ubicom and Kamiya. Although the claims are not identical, the claims of the instant application are not patentably distinct from the claims of the copending application because the claims of the instant application are obvious in view of the claims of the

copending application in combination with the teachings of Stolan, Ubicom and Kamiya as

applied above.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

17.   Applicant's arguments filed 02/06/2009 have been fully considered but they are not

persuasive. Applicant alleges that Stolan does not disclose a two-step process of detecting a

reset condition and subsequently confirming the reset under an enquiry routine. The examiner

respectfully disagrees. Fig. 2 of Stolan and its accompanying description [particularly col. 4, line

66 – col. 5, line 20] teach such a process. The following is one possible interpretation of Stolan

that can be used to anticipate the above process. First, the system of Stolan outputs a

programmable reset signal (outputted by box 40 onto line 42 in Fig. 2). The outputting of this

value onto the line 42 constitutes the "detection" of the claim (the programmable reset condition

has been "detected" by the signal line 42). The line 42 is then transmitted to the multiplexer 26,

which uses the mode select input to determine what signal to output on the reset out line 56. In

the case that the mode select chooses the programmable reset, the value on line 42 is output on

line 56. The signal 56 is then fed into a buffer 57 which then outputs the value to the

microprocessor. The steps of detecting a reset signal on the input to the buffer 57 and outputting

that signal to the microprocessor constitute the "enquiry routine" and the "checking" of the

claim. This appears to be a reasonable interpretation because the purpose of the buffer 57 is to

check the value on line 56 to determine if a reset is indicated and then confirm that reset

condition by outputting a reset value to the microprocessor.

The examiner notes that the above interpretation of Stolan is only one of many that can be used to anticipate the broadly phrased language of the claims. For instance, the examiner respectfully submits that the simple act of the microprocessor resetting is itself a confirmation that the reset signal has been successfully applied. The examiner respectfully suggests that more detail regarding the "enquiry routine" should be added to the claim in order to differentiate over the prior art.

Applicant next alleges that Stolan does not disclose that the programming reset signal includes at least one special sequence. The examiner respectfully disagrees. The programmable reset of Stolan constitutes a special sequence because it is an alternative to the usual method for resetting the system using an overflow counter [col. 5, lines 5-20].

Conclusion

18.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey S. Faherty whose telephone number is (571) 270-1319. The examiner can normally be reached on Monday-Thursday and every other Friday, 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eddie P Chan/   /Corey S Faherty/
Supervisory Patent Examiner, Art Unit 2183   Examiner, Art Unit 2183